

Experienced
in
Hydraulics
and
Aircraft
Engineering



Industrial company with
100 years tradition in
precise mechanical
engineering, 80+ years
experience in aeronautical
industry.



Located in South Bohemia on
the international Route E55
Prague – Linz

COMPANY HISTORY



Establishment of the company
Jan Hans & Jan Crkva

1919 JEVAN



Start of aeronautical production in
the field of fuel system components

1936 JIKOV



Nationalisation of JIKOV Co., establishment of the
state owned company Jihoceske strojirny – Jihostroj

1951 JIHOSTROJ



Start of production of gear pumps

1956



Development of FCU for turboprop engine M601

1978



Privatisation of the company, establishment
of the joint – stock company Jihostroj Velešín

1992



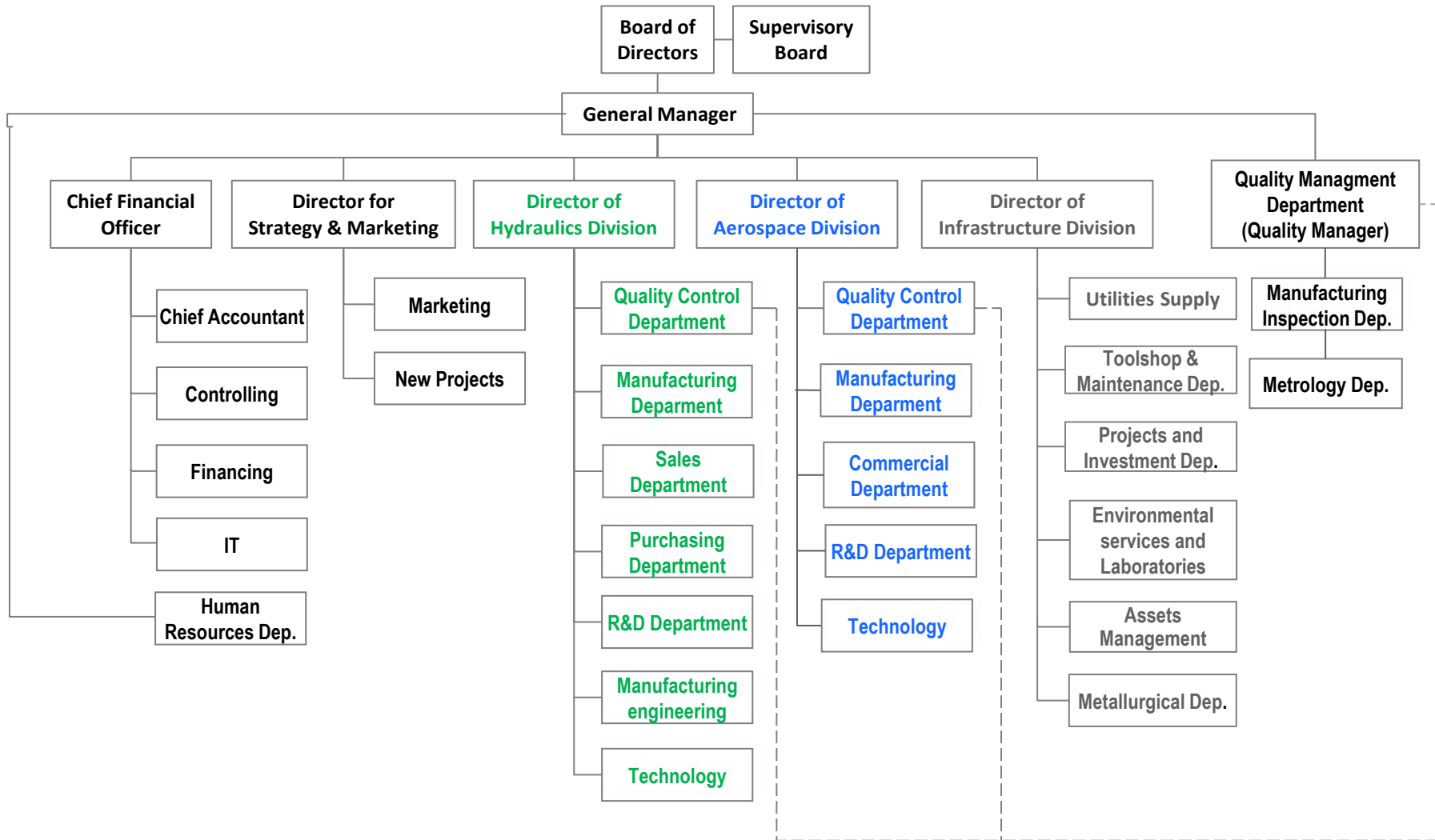
Good establishment on global market,
continuous growth (except 2008 – 2009 and 2020)

2023

LAYOUT OF THE COMPANY



COMPANY STRUCTURE



QUALITY ASSURANCE SYSTEM

- QMS (Quality Management Syst.) certified according to **ISO 9001:2015**
- **EMS** (Environmental Management Syst.) certified according to **ISO 14001:2015**
- **EnMS** (Energy Management System) certified according to **ISO 50001:2018**
- **NADCAP** certified



INDUSTRIAL & MOBILE HYDRAULICS DIVISION



Products and Application Platforms...



Hydraulic gear pumps & motors



Flow dividers

AEROSPACE DIVISION

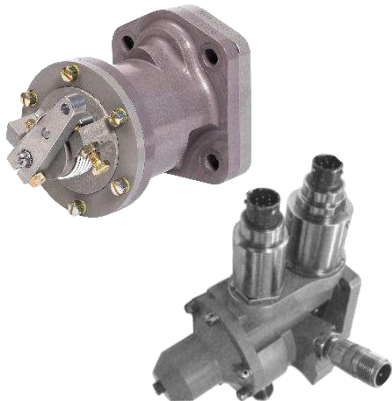
Products and Application Platforms...



ENGINE FUEL CONTROL SYSTEMS



APU FUEL CONTROL AND OIL SYSTEMS



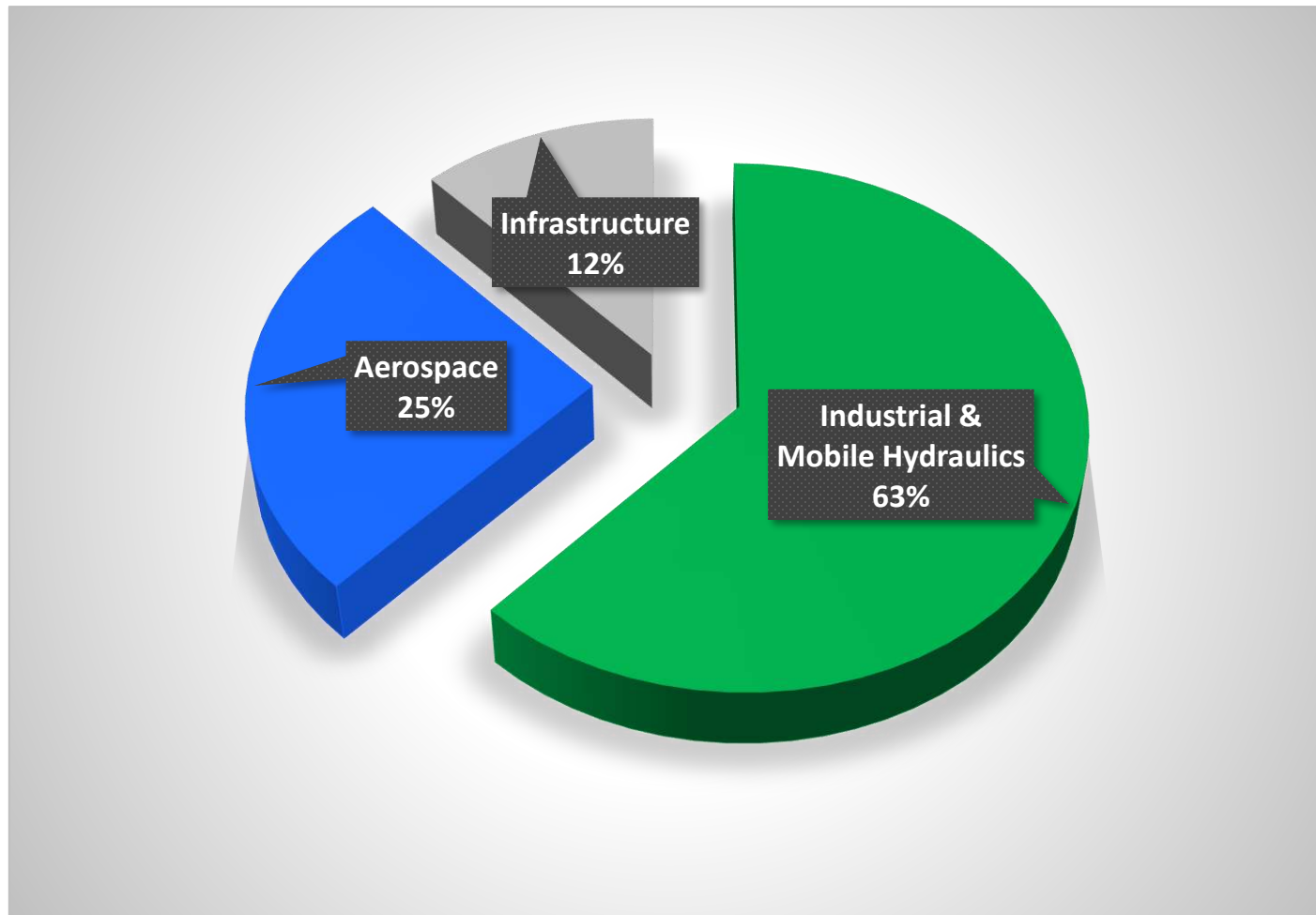
PROPELLER CONTROL SYSTEMS



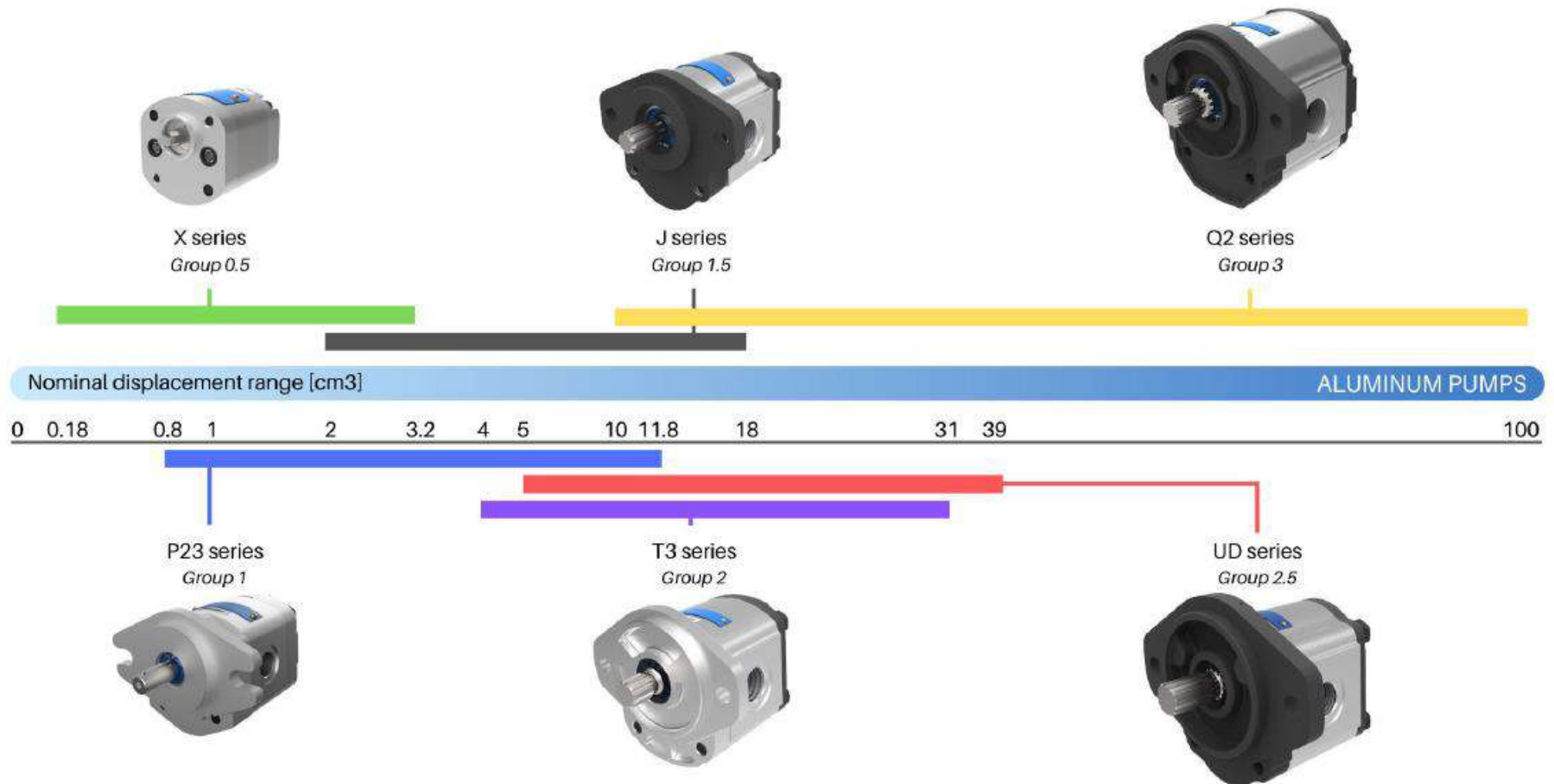
COMPONENTS FOR AIRFRAME HYDRAULIC AND FUEL SYSTEM

SHARE OF INDIVIDUAL ACTIVITIES

on the total annual turnover of the company in 2022 was \$ 40,5 mil.



ALUMINIUM GEAR PUMPS AND MOTORS



CAST IRON GEAR PUMPS

QHD series = 2 part design



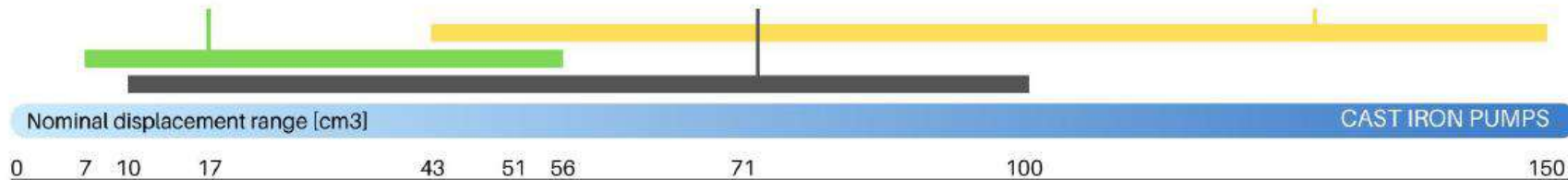
QHD0 series
Group 2.5



QHD1 series
Group 3



QHD2 series
Group 4



GHD0 series
Group 2.5



GHD1 series
Group 3



GHD2 series
Group 4



GHD series = 3 part design

FAN DRIVE GEAR MOTORS

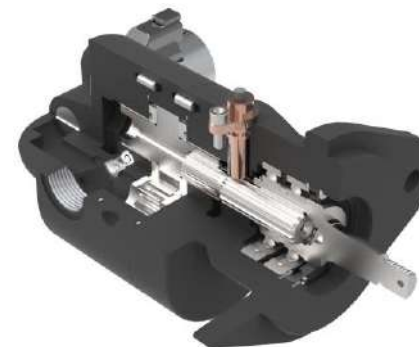
- The most effective way to cool diesel engines
- Minimizing fuel consumption and emissions



Aluminium



Cast Iron



FLOW DIVIDERS

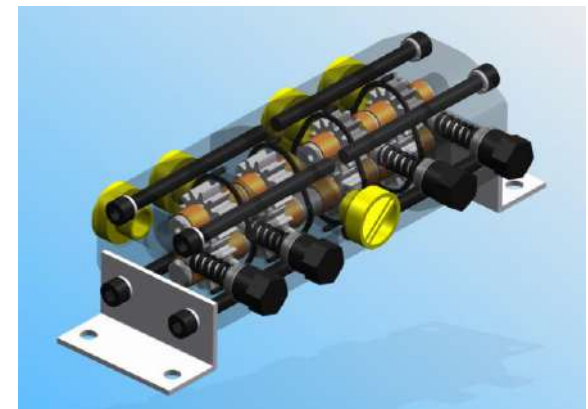
12 % of production – 16 000 units/year



The DPV 2 flow dividers are robust gear type products of cast iron body, without hydraulic balancing with a fixed axial play. They are applied in situations where it is necessary to split the flow with a sufficient accuracy regardless of the pressure ratio in the individual branches. The output branches can be fitted with the relief valves (V) which are adjusted to the customer's specifications.

The flow dividers can be manufactured with the option of two to six sections.

- Standard Flow dividers - DPMV, DPV2, DPTV
Their accuracy is higher than 90%.
- Precise Flow dividers - DPJV
Their accuracy is higher than 97%.



**Others
(2 % of production)**

- Valves
- Spare parts

HYDRAULICS MACHINING CAPABILITIES

- CNC turning
- milling, grinding
- reaming
- superfinishing
- boring, jigboring
- straightening

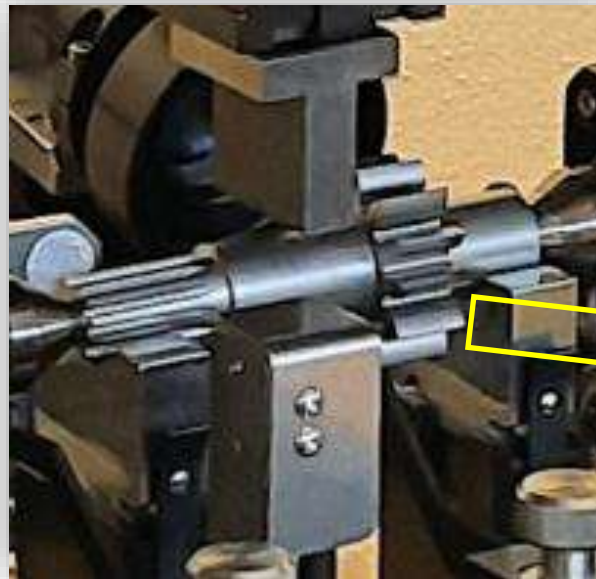


HYDRAULICS MACHINING CAPABILITIES

- PGP511 Figure 8 bush block centre



- straightening
after heat treatment



HYDRAULICS MACHINING CAPABILITIES

- Robotics
PGP505/511
covers



- Robotics
PGP 505
housings



HYDRAULICS MACHINING CAPABILITIES

- Automation



HEAT & SURFACE TREATMENT

Heat Treatment

- cementation
- annealing, carburizing, tempering,
- nitriding, quenching, stabilization, ...

Surface Treatment

- nickel, zinc plating,
- phosphatation, passivation, anodizing
- type I, II, III, hard anodize,
- alodine, complex masking

Painting

- powder, wet



HYDRAULICS INSPECTION EQUIPMENT

- Coordinate-measuring machines
- Metallurgical laboratory
- Metrological department



5-axis CMM MITUTOYO

CMM for gears KLINGELNBERG P26

3D microscope KEYENCE



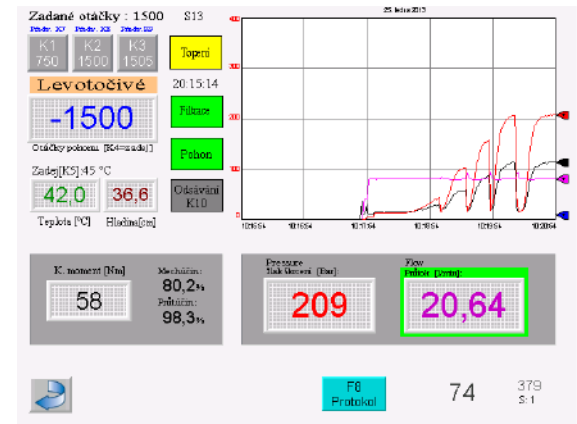
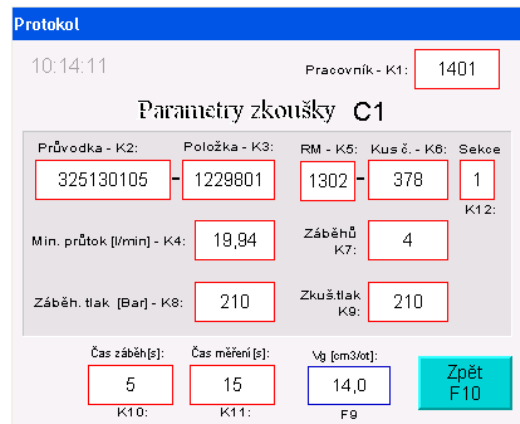
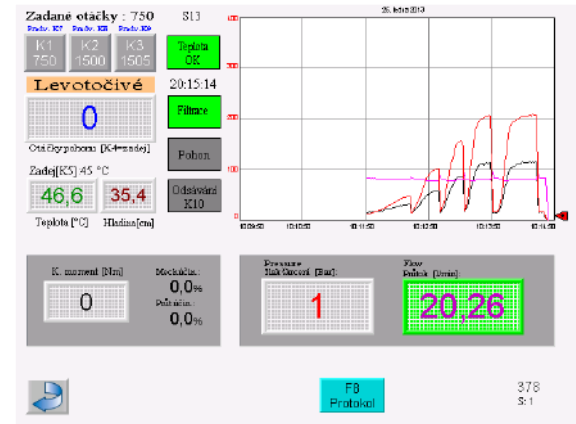
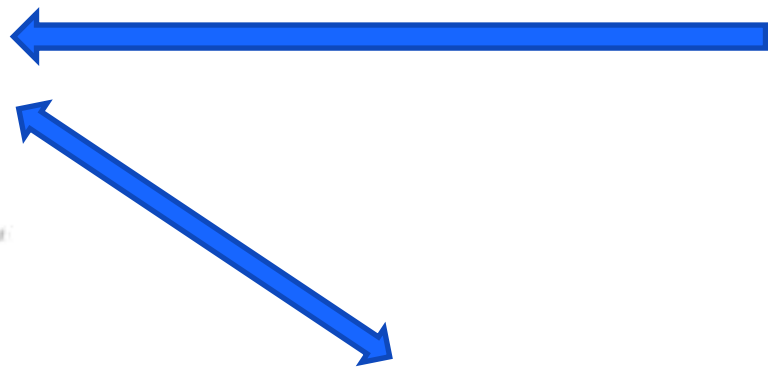
HYDRAULICS TESTING

- 100 % functional inspection – Acceptance Production Testing, development testing
- products and subassemblies functional testing
- long-endurance tests in automated 24/7 cycle
- high/low temperature & barochamber tests
- testing in simulated closed control loop



HYDRAULICS TESTING

Testing results are online visible
and connected with our ERP - **INFOR**



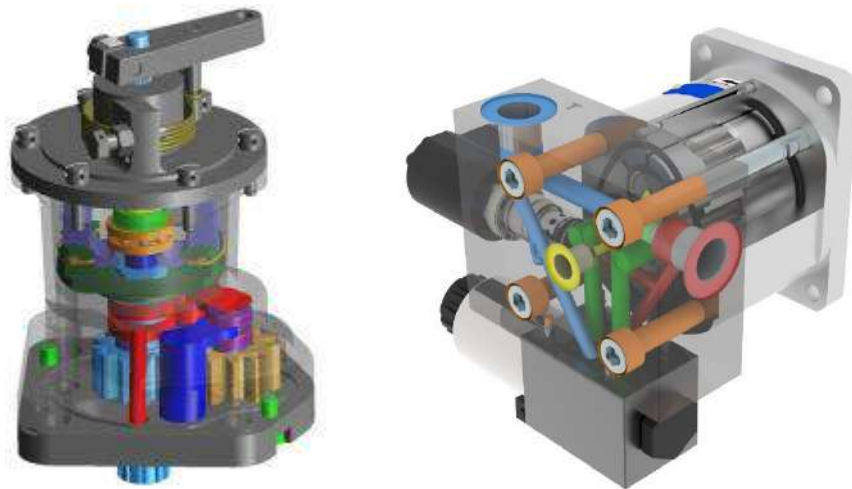
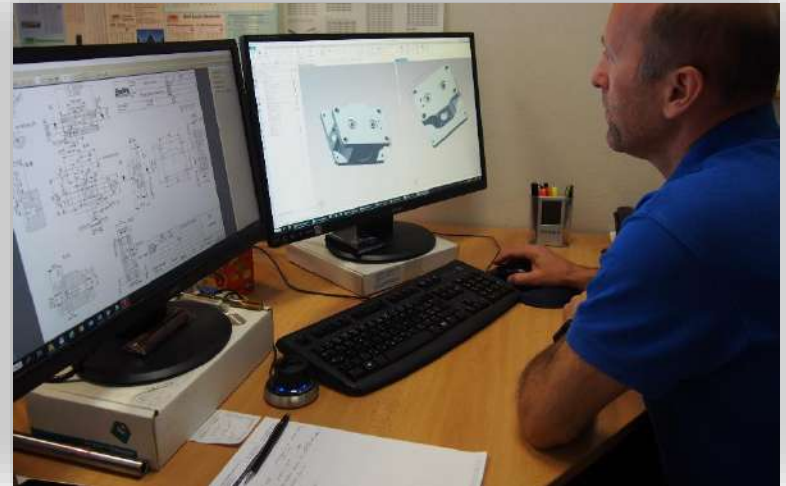
Warehouse and Expedition Department:

- Automated warehouse system for parts and tools
- Careful packing according to delivery destination and customer's requirements



Aerospace + Hydraulic R&D Department:

- 24+10 qualified people
- research & design activities
- analytical works (FMEA, ...)
- test benches design
- measuring methods development
- documentation and configuration control

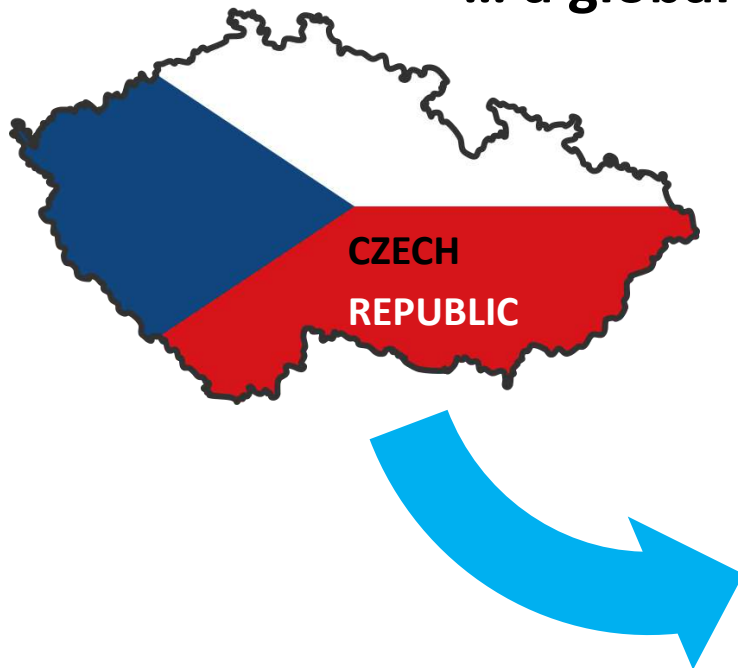


Equipment:

- 26 CAD/CAM 3-D workstations
Unigraphics and Solid Edge,
- FEM Ansys, Flow analysis CFX
- programming, computing and
simulating tools
- testing and measuring
equipment

JIHOSTROJ EXPORT TERRITORIES

... a global market presence





Thank you for your attention.